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(54) **MUSIC SIGNAL COMPRESSION METHOD**

(57) Abstract:

PURPOSE: To compress a music signal with a few amount of transmission information with high quality by performing linear approximation on the sampling system of the music signal A/D-converted in advance, and finding a straight line by using a method of least square.

CONSTITUTION: The music signal is A/D-converted to the sampling systems S_1, S_2, S_3.... The straight lines 11, 12, 13, and 14 to approximate the music signal are found as the straight lines in which no error of least square exceeds a threshold value decided in advance. The music signals 15-17 are the ones in which the samples S_1, S_2 and a flag F_1, the samples S_3, S_4 and a flag F_2, the samples S_5, S_6 and a flag F_6 are encoded, respectively. At such a case, $(a_1\text{-}a_4)$ and $(b_1\text{-}b_4)$ are coefficients to decide the straight lines, and $(n_1\text{-}n_4)$ represent the number of samples, and when encoding with 16 bits per sample is performed, 288 bits are required for 18 samples, but in this system, 216 bits are required, then, the compression of information can be performed.